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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,144	07/28/2003	Quoc N. Dang	K35A1303	4387

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EXAMINER

PEUGH, BRIAN R

ART UNIT PAPER NUMBER

2187

DATE MAILED: 08/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/628,144

Applicant(s)

DANG ET AL.

Examiner

Brian R. Peugh

Art Unit

2187

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,6-9 and 13-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-18 is/are allowed.
- 6) ☒ Claim(s) 1,2,6-9,13,14,19 and 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☒ Interview Summary (PTO-413)  
Paper No(s)/Mail Date 08102004.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Oath/Declaration***

The Declaration filed on October 22, 2003 under 37 CFR 1.131 is sufficient to overcome the Sokolov et al. (US# 6,018,789) reference. Thus, the previous rejections attributed to the Sokolov et al. reference have been withdrawn.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1 and 8 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-6 of U.S. Patent No. 6,606,682. Although the conflicting claims are not identical, they are not patentably distinct from each other because still reads upon the aforementioned patent.

Initially it should be noted that the present application is a continuation application of patent application 09/552,407, now U.S. Patent No. 6,606,682 which has the same inventive entity and the same assignee as the instant application. The disclosures relating to the claims in question in the instant application and U.S. Patent No. 6,606,682 are identical. Accordingly, there is clearly a commonly disclosed embodiment in the application and the patent.

A comparison of independent claims 1 and 8 of the instant case with claims 1-6 of U.S. Patent No. 6,606,682 reveals that these two application claims define a generic embodiment of the species covered by the patented claims 1-6 of U.S. Patent No. 6,606,682. Accordingly, the generic application claims 1 and 8 are anticipated by the patented species claims 1-6 of U.S. Patent No. 6,606,682, and therefore precludes the issuance of application claims 1 and 8 in accordance with **In re Goodman**. In other words, patent claims 1-6 already cover, or "read on", claims 1 and 8 of the application. This is essentially the epitome of obviousness since the application claims are not "in any way unobvious" over the patented claims.

With respect to claim 1 of the instant application and claim 1 of the U.S. Patent No. 6,606,682, the side-by-side analysis is as follows:

<u>U.S. Application No. 10/628,144</u>	<u>U.S. Patent No. 6,606,682</u>
1 . A disk drive, comprising:	1 . A disk drive, comprising:
a cache memory having a plurality of sequentially-ordered memory clusters for caching disk data of disk sectors identified by logical block addresses; and	a cache memory having a plurality of sequentially-ordered memory clusters for caching disk data of disk sectors identified by logical block addresses; and
a plurality of cluster control blocks, each cluster control block having a cluster segment record for associating the cluster control block with a particular memory cluster and for forming variable length segments of the memory clusters without regard to the sequential order of the memory clusters;	a plurality of cluster control blocks, each cluster control block having a cluster segment record for associating the cluster control block with a particular memory cluster and for forming variable length segments of the memory clusters without regard to the sequential order of the memory clusters;
a tag memory having a plurality of tag records, each tag record for assigning a segment to a contiguous range of logical block addresses and for defining the cluster control blocks forming the segment, and each segment of the memory clusters for caching disk data of the assigned contiguous range of logical block addresses.	a tag memory having a plurality of tag records, each tag record for assigning a segment to a contiguous range of logical block addresses and for defining the cluster control blocks forming the segment, <b>each tag record defining a length for the assigned segment by pointing to a first cluster control block and to a last cluster control block for the segment</b> , and each segment of the memory clusters for caching disk data of the assigned contiguous range of logical block addresses.

Claims 2, 6, 7, 9, 13, 14, 19, and 20 are rejected as being dependent upon a previously rejected claim.

### ***Response to Arguments***

Applicant's Arguments regarding the Declaration filed under 37 CFR 1.131 are persuasive. Thus, the previous rejections attributed to the Sokolov et al. reference have been withdrawn.

### ***Allowable Subject Matter***

Claims 15-18 are allowed over the prior art of record.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art corresponds to related cluster systems.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian R. Peugh whose telephone number is 703-306-5843. The examiner can normally be reached on Monday-Thursday from 7:00am to 4:30pm. The examiner can also be reached on alternate Friday's from 7:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Sparks, can be reached on (703) 308-1756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-9600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

August 18, 2004

  
Brian R. Peugh  
Patent Examiner  
Art Unit 2187